



WATER USE EFFICIENCY IN PUBLIC WATER SYSTEMS

Joint Legislative Task Force on Water Resource
Mitigation
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Presenter



Mike Means

Capacity Development and Policy Manager

Office of Drinking Water

Water Use Efficiency in Washington

1989-2020

Legislative Action



Planning and implementation



Improved water use efficiency

Legislative Action

- 💧 RCW 43.20.230 (1989) required state development of procedures and guidelines.
- 💧 RCW 43.20.235 (1993) required water systems to evaluate rate structures that encourage water conservation.
- 💧 RCW 70A.125.170 (2003) specified requirements for municipal water suppliers.

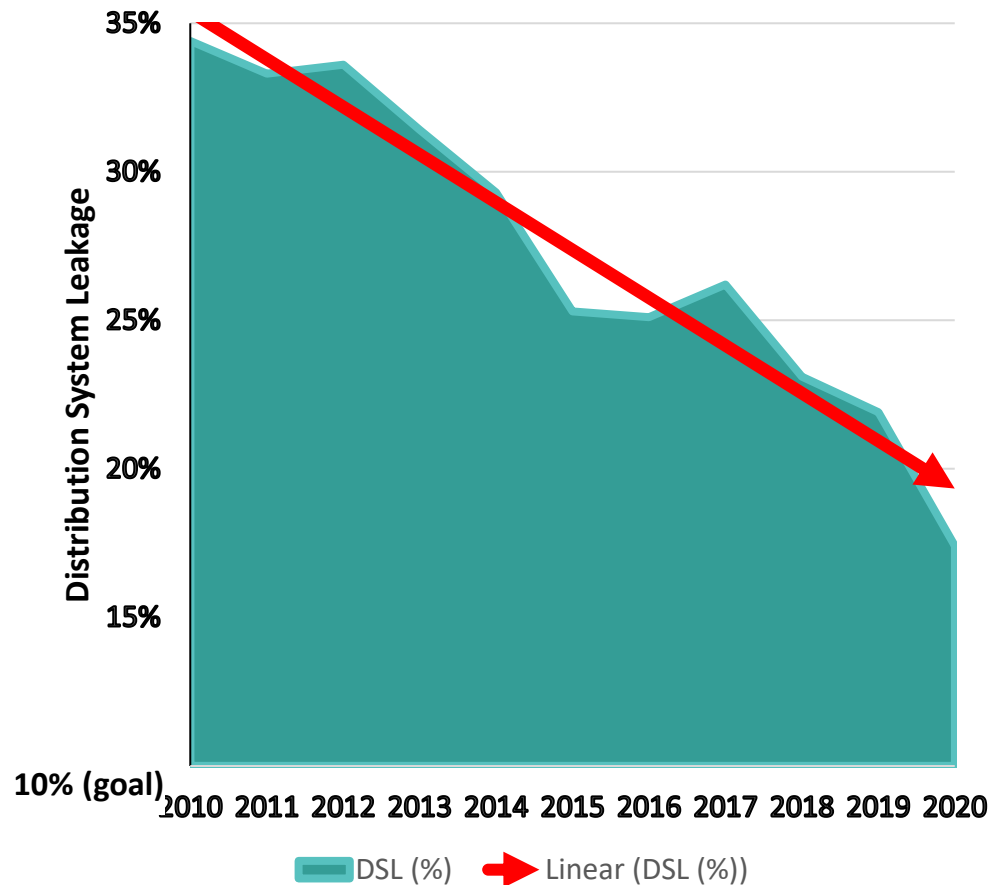
Planning and Implementation

- 💧 Part 8 of 246-290 WAC (2007) requires:
 - Creation of water use efficiency (WUE) plans
 - Reduction of distribution system leakage
 - Setting achievable goals for their customers
 - Adoption of measures to help their customers
 - Reporting performance annually
- 💧 WAC 246-290-496 (2007) requires service meters for all connections, with exceptions

Supply Side: Walla Walla Repairs

From 2010 to 2020:

- 💧 Distribution system leakage *reduced* by infrastructure improvements
- 🔴 Average reduction of 1.7% per year
- 💧 Now saving over 600,000,000 gallons per year

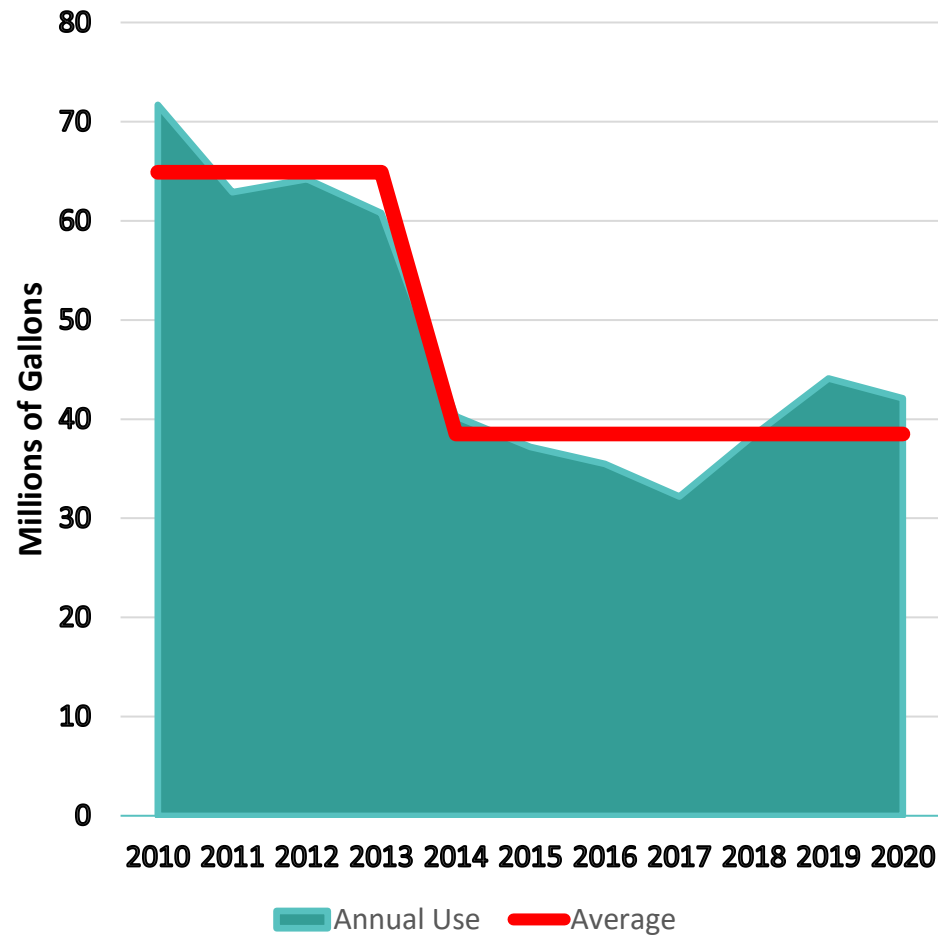


Sources: Walla Walla Water Department Annual Water Use Efficiency Performance Reports, 2010-2020

Demand Side: Mesa Customer Choices

Beginning in 2014:

- 💧 Mesa began charging by volume
- 💧 Mesa's production *decreased* by 26.4 million gallons per year
- 🔴 Water production *decreased* by 41%

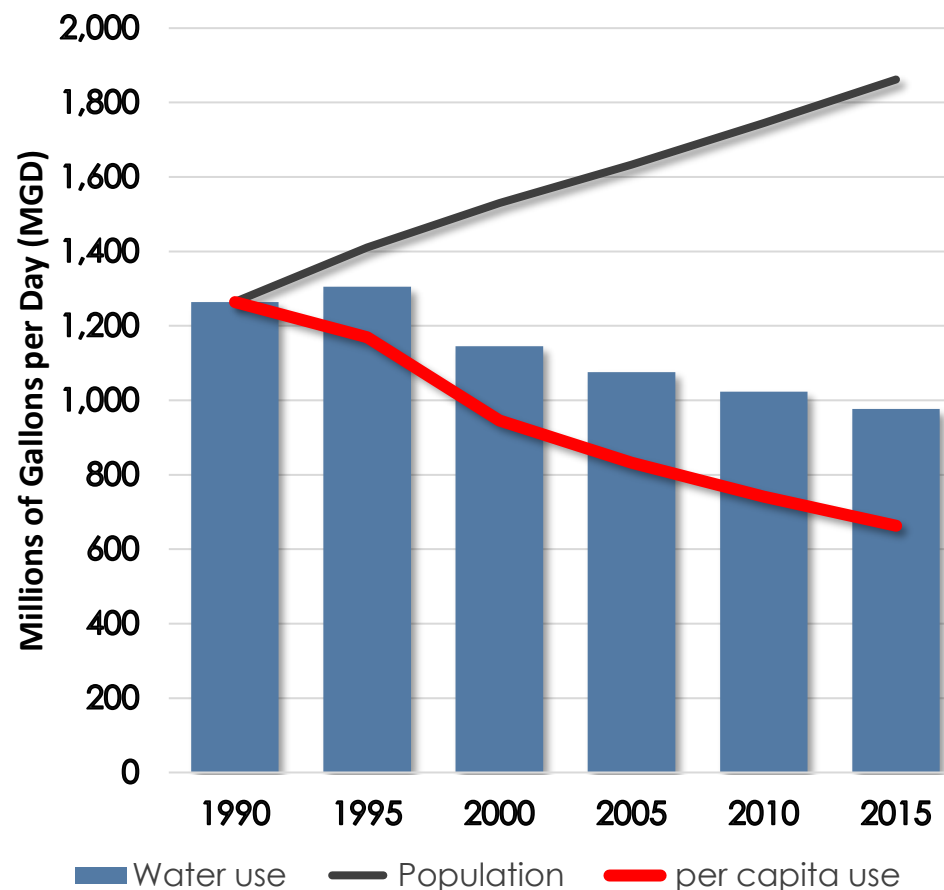


Sources: Mesa Water Department Annual Water Use Efficiency Performance Reports, 2010-2020

Population Versus Water Use

From 1990 to 2015:

- 💧 Washington's population *increased* by 47%
- 💧 Domestic and public water use *decreased* by 23%
- 🔴 Per capita water use *decreased* by 48%



Sources: USGS Fact Sheet 2010-3057, USGS Circular 1405, and USGS Circular 1441

Summary

- 💧 Public water systems have decreased distribution system leakage
- 💧 Water system customers are making informed choices that reduce demand
- 💧 Despite population increases, public water system withdrawals have decreased



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